

KEY FEATURES:

- Spectral resolution: 0.5 nm FWHM
- High sensitivity and dynamic range
- Exceptional thermal stability
- Includes world's smartest spectroscopy software



With its focal length of 75 mm, the Qwave offers technical specifications that you would normally expect to find in much larger spectrometers. Combined with our unique spectroscopy software "Waves" (see next page), it's the ideal spectroscopic instrument for all scientific applications that require a resolution of up to 0.5 nm and a numerical aperture of up to 0.10. Its compact design allows tight integration in applications where space is limited, like hand-held analysis devices.

Applications

- Light analysis
- Chemical research
- Raman spectroscopy
- Forensic analysis
- System integration
- Process control and monitoring

Options

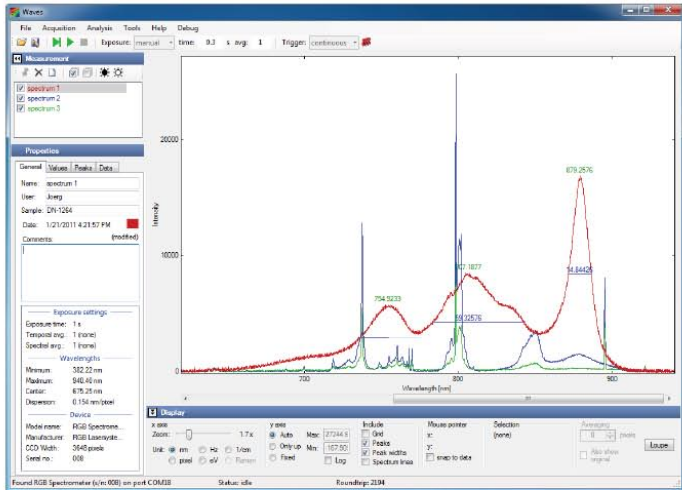
- Custom wavelength ranges and gratings
- Custom entrance slit (determines resolution vs. sensitivity)
- Custom optical connectors
- 2048 pixel CCD detector for superior sensitivity
- Detector coating for enhanced UV detection
- Sample holder

	Spectrometer
Focal length	75 mm
Numerical aperture	0.10
Wavelength range	default: 350 - 950 nm optional: custom wavelength ranges between 200 and 1100 nm
Grating	600 lines/mm*
Entrance slit	20 μm*
Spectral resolution	0.5 nm
Dynamic range / SNR	> 2000 : 1 (t _{exp} = 1 s)
Stray light	< 0.05 %
Exposure time range	100 μs to 600 s
Detector	3648 pixel linear CCD detector*
A/D converter	16 bit 15 MHz
Calibration	Wavelength, sensitivity and multiple dark spectra stored within device
Transfer speed to PC	90 ms per spectrum
Optical interface	SMA connector*
Digital Interface	USB 2.0
Dimensions	89.5 × 68.0 × 19.5 mm (technical drawing available on our website)
Weight	155.4 g
Operating temperature	-15 °C to 60 °C (non-condensing)
Storage temperature	-25 °C to 70 °C
Power consumption	5 V DC, 500 mA (supplied via USB, no power adapter required)
PC operating system	Windows 7, Vista, XP

* other options available on request

Waves

Every Qwave spectrometer includes Waves, the smartest general-purpose spectroscopy software on the planet. Waves not only includes unique sophisticated algorithms for data acquisition and evaluation, it also provides these features through a clear and straightforward user interface that's designed to make things easy.



Software features:

- Take and display series of spectra
- Dynamic exposure control with dark spectrum interpolation
- Import most ASCII-based file formats
- Export as ASCII table to almost any numerical analysis software
- Comprehensive tools for displaying and analyzing spectra
- "Strip charts" for comparing characteristic values between multiple spectra including peak follower
- Graph printing and export to PDF
- Dynamic peak finder (no need to set a threshold level)
- Automated wavelength calibration
- Dark spectrum interpolation
- Colorimetry

All spectrum evaluation options are available with as little mouse clicks as possible. To zoom in, just move the zoom slider. To move around, just move the scrollbar. To change the x axis unit, just click the corresponding button. There is no step two. For some features, there is not even a step one: values such as peaks or colorimetry are instantly calculated as soon as you take a spectrum.

There is just one version of Waves that includes all features, and it's free. No license fees, no need to buy additional packages, no hassle with copy protection.

Waves will be released in April 2011. A software development kit to control the spectrometer from your own software will be made available in summer 2011. For a free preview release of Waves, ask our sales team.